Memorandum

To: *Stephanie Vaughn (USEPA)*
Elizabeth Buckrucker (USACE)

From: *Sharon Budney (CDM)*
George Molnar (CDM)

Date: *April 5, 2010*

Re: *Status Report (March 2010)*
CPG Oversight of Physical Water Column Monitoring
Lower Passaic River Restoration Project

On behalf of the United States Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (USACE), Kansas City District, CDM Federal Programs Corporation (CDM) is providing oversight of the Cooperating Parties Group (CPG) remedial investigation/feasibility study (RI/FS) field activities associated with physical water column monitoring (PWCM), and the collection of physical data in the Lower Passaic River (LPR).

CDM oversight activities were conducted March 22 through March 25, 2010. Oversight included the observation of instrumentation deployment, and collection of samples in the LPR in support of the CPG PWCM study. In addition, CDM also collected split samples at select locations. All activities were conducted in accordance with the CPG *Quality Assurance Project Plan (QAPP)/Field Sampling Plan Addendum, Remedial Investigation Water Column Monitoring/Physical Data Collection for the Lower Passaic River, Newark Bay and Wet Weather Monitoring, Lower Passaic River Restoration Project*, Revision 4, March 2010.

Photographs of field activities can be found in Attachment 1. Copies of the logbook notes can be found in Attachment 2.

Instrument Deployment at Locations below Dundee Dam (March 22 through 24, 2010)

The following summarizes oversight observations of instrument deployment conducted March 22 through March 24, 2010 at river miles (RM) 1.4, 4.2, 6.7, 10.2, and 13.5. Prior to deploying moored instruments, CPG contractor Ocean Surveys Incorporated (OSI) lowered a conductivity, temperature, and depth/optical backscatter (CTD/OBS) meter to obtain a profile of real-time measurements through the water column. Afterwards, an instrument array consisting of a CTD/OBS and an acoustic Doppler current profile (ADCP) meter was deployed on the river bottom. Attached to the bottom array was a buoy which suspended a CTD/OBS instrument three feet below river surface. All instruments were anchored, and deployed in the correct locations.

After all instruments were deployed crews waited approximately 15 to 20 minutes to allow any suspended sediments stirred up during deployment to settle or be swept away.

Afterwards, surface water samples for suspended solids concentration (SSC) were collected three feet above river bottom, and three below river surface. Samples were collected by CPG contractor AECOM . Prior to sample collection a CTD/OBS meter was lowered to obtain a profile of real-time measurements through the water column. Real-time readings were also measured during sampling via pump and tubing which were attached to the CTD/OBS meter.

March 22, 2010: CDM oversight staff observed the deployment of CTD/OBS and ADCP moorings/buoys and collection of SSC samples at RMs 1.4 and 4.2.

March 23, 2010: CDM oversight staff observed the deployment of CTD/OBS and ADCP moorings/buoys and collection of SSC samples at RMs 6.7 and 10.2.

March 24, 2010: CDM oversight staff observed the deployment of CTD/OBS and ADCP moorings/buoys and collection of SSC samples at RM 13.5.

All buoy-mounted instruments were suspended approximately three feet below river surface. The coordinates of instrument arrays and approximate depths of bottom mooring instruments positioned within the water column are as follow:

RM 1.4 - 691228.80 Northing/597991.01 Easting; Depth of 19 feet
RM 4.2 - 692307.24 Northing/588243.0 Easting; Depth of 15.8 feet
RM 6.7 - 702834.80 Northing/586142.48 Easting; Depth of 10.5 feet
RM 10.2 - 719746.20 Northing/592106.37 Easting; Depth of 14.2 feet
RM 13.5 – 734288.0 Northing/595060.0 Easting; Depth of 13.5 feet

Instrument Deployment and ADCP Transect Survey above Dundee Dam (March 24)
The following summarizes oversight observations of OBS meter deployment, ADCP transect survey, and collection of surface water samples above Dundee Dam (RM 17.5). Per the CPG QAPP, only an OBS meter is deployed at this location which is affixed to a buoy suspending it three feet below river surface. River depth at this location was approximately 8.5 feet.

March 24, 2010: CDM oversight staff observed the deployment of an OBS meter, and ADCP transect survey above Dundee Dam. During this one-time mobilization (for the month of March) at this location, surface water samples were also collected. In addition, CDM collected split samples from the location collocated with the buoy-mounted OBS meter.

At arrival, OSI maneuvered to the location of the buoy-mounted OBS meter prior to deployment, and lowered a CTD/OBS meter to obtain a profile of real-time measurements through the water column. The buoy-mounted OBS meter was then deployed. Location coordinates are as follow:

RM 17.5 above Dundee Dam - 747508.48 Northing/594488.23 Easting

After deployment of the OBS meter, a boat-based ADCP transect survey was conducted. The survey was conducted within the area of four predetermined locations (P1 through P4) moving across the river channel. Once the survey was finished, crews lowered a CTD/OBS

meter to obtain a profile of real-time measurements through the water column at each location. This was followed by the collection of surface water from three feet below river surface via pump and tubing mounted to the instrument. Samples were collected for SSC, dissolved organic carbon (DOC), and particulate organic carbon (POC) analysis. In addition, a sample for SSC, DOC, and POC analysis was also collected from three feet above river bottom at Location P2 which was collocated with the buoy-mounted OBS meter. Samples were collected by an AECOM representative.

CDM's Final QAPP for PWCM oversight activities indicated the CPG would collect only one sample from three feet below river surface at location P2. Thus, CDM proposed that one split sample be collected at this location. Since AECOM also collected a sample from three feet above river bottom, CDM also collected an additional split sample. A Field Change Request Form detailing this change can be found in Attachment 3.

CDM oversight staff collected split samples from both depths for SSC, DOC, and POC analysis at Location P2. Samples were collected at the same time as those collected by AECOM via "Y" junction at the end of tubing which was connected to the pump. Split samples and corresponding CPG samples are presented in Table 1. Split samples were delivered via hand courier to the EPA Division of Environmental Science and Assessment (DESA) laboratory for analysis. Copies of CDM's signed chain of custodies can be found in Attachment 4.

ADCP Transect Surveys at Locations below Dundee Dam (March 25)

The following summarizes oversight observations of ADCP transect surveys and the collection of surface water samples at locations (RMs 1.4, 4.2, 6.7, 10.2, and 13.5) below Dundee Dam.

March 25, 2010: CDM oversight staff observed boat-based ADCP transect surveys at RMs 1.4, 4.2, 6.7, 10.2, and 13.5. Transect surveys were conducted during ebb and flood tides. Each survey was conducted in the area of three predetermined locations (P1 through P3) moving across the river channel. Once each survey was finished, crews lowered a CTD/OBS meter to obtain a profile of real-time measurements through the water column. This was conducted at each location followed by the collection of surface water from three feet below river surface, and three feet above river bottom via pump and tubing mounted to the instrument. Samples were collected for SSC, DOC, and POC analysis from locations collocated with moored instruments, and from locations furthest away. These locations consisted of P1 and P3 at every RM. No samples were collected for DOC and POC analysis at location P2 at any RM.

CDM oversight staff collected split samples during each transect surveys (ebb and flood tide) from both depths at locations collocated with moored instruments. Samples were collected for SSC, DOC, and POC analysis, and were collected at the same time as those collected by AECOM via "Y" junction at the end of tubing which was connected to the pump. Split samples and corresponding CPG samples are presented in Table 1. Split samples were delivered via hand courier to the EPA DESA laboratory for analysis. Copies of CDM's signed chain of custodies can be found in Attachment 4.

Table 1
Cooperating Parties Group and CDM Split Sample Identification
March 2010 Physical Water Column Monitoring Oversight
Lower Passaic River Restoration Project
Lower Passaic River, New Jersey

River Mile	Mooring Location	CPG Sample ID	CDM Split Sample ID	QC Samples	Tide Event	Collection Date	Analysis
1.4	P3	10A-E03-T014-P3-AS	10A-E03-T014-P3-AS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E03-T014-P3-BS	10A-E03-T014-P3-BS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E04-T014-P3-AS	10A-E04-T014-P3-AS-CDM		ebb	3/25/2010	SSC, DOC, POC
		10A-E04-T014-P3-BS	10A-E04-T014-P3-BS-CDM		ebb	3/25/2010	SSC, DOC, POC
4.2	P1	10A-E03-T042-P1-AS	10A-E03-T042-P1-AS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E03-T042-P1-BS	10A-E03-T042-P1-BS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E04-T042-P1-AS	10A-E04-T042-P1-AS-CDM		ebb	3/25/2010	SSC, DOC, POC
		10A-E04-T042-P1-BS	10A-E04-T042-P1-BS-CDM		ebb	3/25/2010	SSC, DOC, POC
6.7	P3	10A-E03-T067-P3-AS	10A-E03-T067-P3-AS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E03-T067-P3-BS	10A-E03-T067-P3-BS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E04-T067-P3-AS	10A-E04-T067-P3-AS-CDM		ebb	3/25/2010	SSC, DOC, POC
		10A-E04-T067-P3-BS	10A-E04-T067-P3-BS-CDM		ebb	3/25/2010	SSC, DOC, POC
10.2	P1	10A-E03-T102-P1-AS	10A-E03-T102-P1-AS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E03-T102-P1-BS	10A-E03-T102-P1-BS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E04-T102-P1-AS	10A-E04-T102-P1-AS-CDM		ebb	3/25/2010	SSC, DOC, POC
		10A-E04-T102-P1-BS	10A-E04-T102-P1-BS-CDM		ebb	3/25/2010	SSC, DOC, POC
13.5	P3	10A-E03-T135-P3-AS	10A-E03-T135-P3-AS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E03-T135-P3-BS	10A-E03-T135-P3-BS-CDM		flood	3/25/2010	SSC, DOC, POC
		10A-E04-T135-P3-AS	10A-E04-T135-P3-AS-CDM		ebb	3/25/2010	SSC, DOC, POC
		10A-E04-T135-P3-BS	10A-E04-T135-P3-BS-CDM		ebb	3/25/2010	SSC, DOC, POC
17.5*	P2	10A-E02-T175-P2-AS	10A-E02-T175-P2-AS-CDM	MS **	NA	3/24/2010	SSC, DOC, POC
			10A-E02-T175-P2-AS-X	Duplicate ***	NA	3/24/2010	SSC, DOC, POC
		10A-E02-T175-P2-BS	10A-E02-T175-P2-BS-CDM		NA	3/24/2010	SSC, DOC, POC

CPG - Cooperating Parties Group
ID - identification
QC - quality control
SSC- suspended solids concentration
DOC - dissolved organic carbon
POC - particulate organic carbon
MS - matrix spike
NA - not applicable; location above head of tide
* - location above Dundee Dam
** - MS only for DOC analysis
*** - field duplicate sample of CDM split sample 10A-E02-T175-P2-AS-CDM denoted with the prefix "X"

CPG samples and CDM split samples are identified by Program-Event-Transect-Station-Depth-Type; split samples are followed by the prefix "CDM"
Where:
Program - Two-digit year plus "A" identifying the Spring 2010 Passaic River sampling program
Event - "E" plus two digit sequence number for sampling event
Transect - "T" plus three-digit representation of river miles by tenths. For example, T042 indicates river mile 4.2
Station - "P" plus single-digit sequence for position along transect moving from left bank. For example, "P2" for second location.
Depth - Single character sequence letter for depth interval. "A" for depth interval nearest river surface (i.e., three feet below surface); "B" for intervals of increasing depth (i.e., three feet above river bottom)
Type - Single character for sample type: "S' for normal sample

Attachment 1
Photographs of Physical Water Column Monitoring Activities

Photo 1: Deploying CTD/OBS meter at RM 1.4

Photo 2: CTD/OBS buoy at RM 4.2

Photo 3. RM 6.7

Photo 4. CTD/OBS buoy at RM 10.2

Photo 5. CTD/OBS buoy at RM 13.5

Photo 6. CTD/OBS buoy at RM 17.5 above Dundee Dam

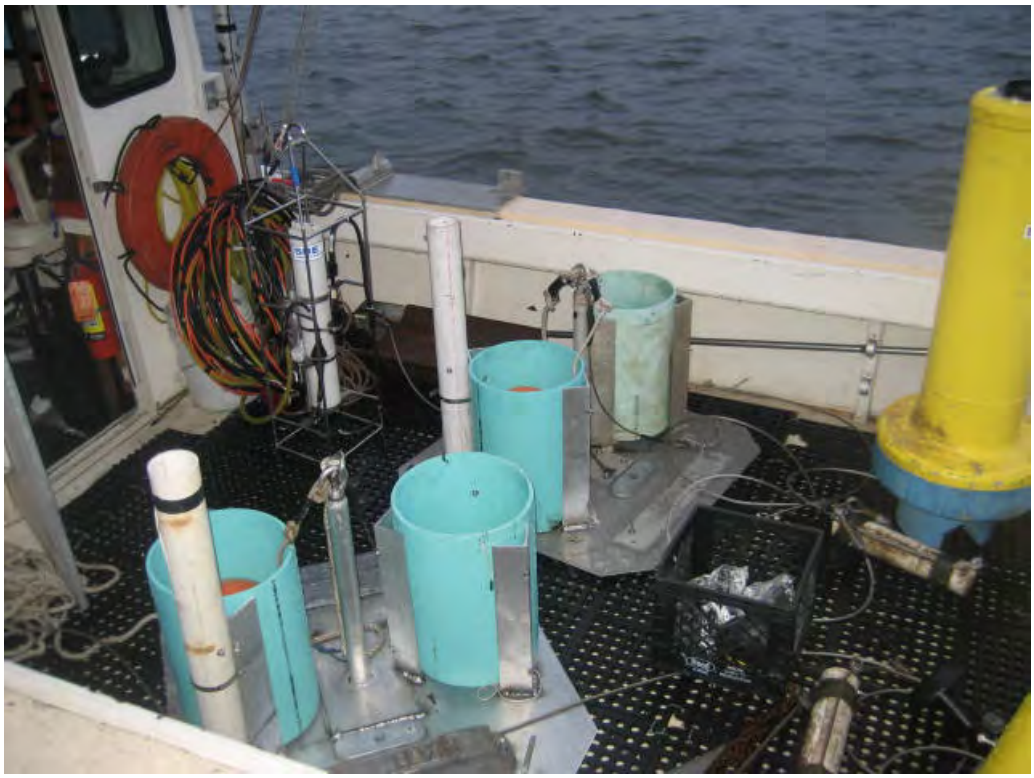

Photo 7. CTD/OBS/ADCP arrays and CTD/OBS buoys prior to deployment

Photo 8. OSI vessel used to deploy instruments at river locations below Dundee Dam

Photo 9. AECOM collecting sample 10A-E01-T014-P3BS at RM 1.4

Photo 10. OSI vessel used to deploy instruments at RM 17.5 above Dundee Dam

Attachment 2
Copies of Oversight Field Logbook Notes

Location Passaic River Date 3-24-10

Project / Client Lower Passaic River

J. Rakowski

PPE: Modified Level D

weather: ~~70~~ 45° (J.R. 3-24-10) farenheit wind

objective: oversight of sample collection on Passaic River.

0850 JR arrives onsite and meets with JO of CDM.

0910 JR boards boat.

Personnel: JR of CDM, John Walker of AECOM Steve B[illegible] and Dustin Kach of OSI

~~0920~~ J.R. 3-24-10

0915 JW holds health and safety briefing.

0920 ~~A~~ (J.R. 3-24-10) OSI deploys YSI and current meter.

0930 ~~boat~~ buoy (J.R. 3-24-10) is deployed.

0935 boat is back at dock.

0940 Steve B[illegible] of OSI departs boat in order to meet with other crew.

0950 New OSI employee on board. Boat is heading toward sampling location. (Mike Lincoln)

1004 AECOMM collects [illegible]

[illegible]

Location Passaic River Date 3-24-10

Project / Client Lower Passaic River

J. Rakowski

sample and duplicate from 3' above river bed. Sample collected 13.5 below water

easting 597207.6 Northing 734289.55

Sample id 10A-E01-T135-P3-B5, 10A-E01-T135-P3-DT (DUP)

1006 Sample collected from 3' below water surface.

Easting 597212.25 Northing 734293.81

water depth 16.5

Sample id 10A-E01-T135-P3-A5

1020 boat arrives back at CPG facility dock.

1030 JR departs site.

J.R.

3-24-10

Location Lower Passaic River Date 3-25-10

Project / Client Lower Passaic River Study Area

J. Rakowski

PPE: Modified Level D
Weather: 40° farenheit
Personnel: JR of CDM
Objective: Collection of river mile 1.4 and 4.3 split samples. JR 3-25-10

0600 JR arrives onsite. OSI tells JR to wait onshore until Louis Berger representative collects their samples in order to board boat. JR will wait at current location. (Passaic River Yacht Club)
0620 Vessel #1 RV Ready II departs LPRYC
0625 Vessel #2 RV able departs LPRYC.
0730 JR boards boat. Jon Walker (AECOM) Jeff Motto Ryan Bollenbach (OSI) on board. Boat heading to River marker 1.4.
0740 Instrumentation dropped.
* JR will be collecting

JR 3-25-10

Location Lower Passaic River Date 3-25-10

Project / Client Lower Passaic River Study Area

J. Rakowski

Samples from River mile 1.4 ~~RM~~ P3 JR 3-25-10
0748 Boat arrives at River mile 1.4 P1 location.
10A-E03-T014-P1-AS
Sample collected. JR 3-25-10
N
E JR 3-25-10
0755 RB said he would let JR put flashdrive into his pc for coordinates
*Note sampling times are in grenwich time zone
1154 10A-E03-T014-P1-BS
1156 JR 3-25-10
1207 10A-E03-T014-P2-BS
1208 10A-E03-T014-P2-AS
collected. JR 3-25-10
es 0815 Pump dropped for P3
1219 10A-E03-T014-P3-BS
location split sampled
cdm id # 10A-E03-T014-P3-BS-CDM
CLP #
1222 10A-E03-T014-P3-AS
location split sampled cdm id # 10A-E03-T014-P3-AS-CDM
~~CLP #~~ JR 3-25-10. DESA is laboratory - no clp lab. Split samples accepted

JR 3-25-10

Location Lower Passaic Date 3-25-10

Project / Client Lower Passaic River Study Area

J. Rakowski

es 0832 Boat headed to 4.3 river mile marker

10A-E03-T042-P1-BS sample time. CDM is accepting

Greenwich 1254 a split sample from this location, CDM id # 10A-E03-T042-P1-BS. CDM accepts sample.

1256 10A-E03-T042-P1-AS sample time * AE com will be Collecting a duplicate. CDM will be accepting a split sample from this location

1257 10A-E03-T042-P1-AT AE Com's duplicate of 10A-E03-T042-P1-AS Sample. J.R 3-25-10

* The total depth of water was 17 J.R 3-25-10

1306 AE Com Collects 10A-E03-T042-P2-BS

1306 AE Com Collects 10A-E03-T042-P2-AS. J.R 3-25-10

AE Com Collects 10A-E03-T042-P3-BS. J.R 3-25-10

J.R 3-25-10

Location Lower Passaic Date 3-25-10

Project / Client Lower Passaic River Study Area

J. Rakowski

AE Com Collects 10A-E03-T042-P3-AS

es 0925 Boat departs 4.2 mile marker.

es 0930 Boat arrives back at LPRYC. CDM will have to wait for tide change in order to continue work

ES 1230 Vessel takes off with Louis Berger Representative. JR will wait at Yacht club since there is not extra room on boat.

* Inspections J.R 3-25-10

- Vessel #2 equipment safety check was performed this morning by OSI. J.R 3-25-10

- Tools and power equipment - no equipment is damaged or out of service.

- JR locates all required emergency equipment - fire extinguisher, spill kit, first aid, and eye wash.

1337 Vessel #2 arrives back on dock. LB employee departs.

1343 Vessel #2 heads out to

J.R 3-25-10

Location Lower Passaic Date 3-25-10

Project / Client Lower Passaic River Study Area

D. Rakowski

mile marker 1.4.

1355 Vessel arrives at mile marker 1.4 and drops equipment.

1409 Probe/Pump is lowered into river in order to record turbidity.

1411 Probe/Pump pulled up. DR

1413 Probe/Pump lowered. 3-25-10

* Clean gloves have been used for each sample collected today.

\+ each bottle collected by AECOM has been sealed between cap and bottle with electric tape.

1413 10A-E04-T014-P1-BS sample time. DR 3-25-10

1415 10A-E04-T014-P1-AS sample time.

1422 10A-E04-T014-P2-BS sample time.

1423 10A-E04-T014-P2-AS sample time.

1430 10A-E04-T014-P3-BS > CDM splits these locations (Accepts)

1433 10A-E04-T014-P3-AS

1459 10A-E04-T042-P1-BS > CDM splits these samples DR 3-25-10

1501 10A-E04-T042-P1-AS

1503 10A-E04-T042-P1-AT (AE Com duplicate on 3' below water location.

1511 10A-E04-T042-P2-BS sample time

DR 3-25-10

Location Lower Passaic River Date 3-25-10

Project / Client Lower Passaic River Study Area

D. Rakowski DR 3-25-10

3-25-10 Sample Summary and Coordinates

Split	AECom Sample id	Time	QA/QC	N	E	Depth
No	10A-E03-T014-P1-BS	1154	No	691291.69	597782.82	13'
No	10A-E03-T014-P1-AS	1156		691292.76	597782.82	3'
No	10A-E03-T014-P2-BS	1207		691244.42	597908.78	14'
No	10A-E03-T014-P2-AS	1208		691252.97	597912.52	3'
yes	10A-E03-T014-P3-BS	1219		691220.95	597898.07	13'
yes	10A-E03-T014-P3-AS	1222		691224.16	597899.77	3'
yes	10A-E03-T042-P1-BS	1254		692302.4	588237.61	14'
yes	10A-E03-T042-P1-AS	1256	AE Com Dup of	692306.67	588231.47	3'
No	10A-E03-T042-P1-AT	1257		692300.9	588238.61	3'
No	10A-E03-T042-P2-BS	1306	No	692382.5	588229.99	16'
No	10A-E03-T042-P2-AS	1308		692387.84	588239.07	3'
No	10A-E03-T042-P3-BS	1317		692456.95	588233.67	13'
No	10A-E03-T042-P3-AS	1321		692453.96	588231.05	3'
No	10A-E04-014-P1-BS	1813				15'
No	10A-E04-014-P1-AS	1815				3'
No	10A-E04-014-P2-BS	1822				19'
No	10A-E04-014-P2-AS	1823				3'
yes	10A-E04-014-P3-BS	1830				18'
yes	10A-E04-014-P3-AS	1833				3'
yes	10A-E04-042-P1-BS	1859				19'
yes	10A-E04-042-P1-AS	1901				3'
no	10A-E04-042-P1-AT	1903	Dup of			3'
no	10A-E04-042-P2-BS	1911				23'

DR 3-25-10

DR 3-25-10

Location Lower Passaic River, NJ Date 3-25-10

Project / Client Lower Passaic River Study Area

JR 3-25-10 ~~Sample Summary~~ Continued

1513 10A-E04-T042-P2-AS Sample 2 time, JR 3-25-10

1517 10A-E04-T042-P3-BS Sample time

1520 10A-E04-T042-P3-AS Sample time

1525 Vessel #2 heads back to LPRYC

1545 vessel #2 arrives at dock

1600 JR departs site

JR

3-25-10

Location Lower Passaic River Date 3-25-10

Project / Client LPRSA

Sample Summary Continued from pg #13

Split	AECOM id	Greenwich Time	QA/QC	Depth
No	10A-E04-042-P2-AS	1513	N	23
	10A-E04-042-P3-BS	1517		18
	10A-E04-042-P3-AS	1929		3

JR

3-25-10

LPR 3/22/10

Lower Passaic River

PWCM Oversight

07:45 → Arrive at Passaic Yacht Club. OSI is present and begins loading equipment into boat.

Weather → Over-cast, light wind ~ 52°F

PPE → Level D Modified

08:00 → SO suits up in mustang and heads over to boat

08:10 → Speak with Sharm Budney of CDM on specifics of today's activities. S.B. would like to know the depths of each boring that will be deployed and the GPS coordinates. The GPS model and coordinate system would also be helpful to write down as well.

08:12 → Starts to rain

08:20 → Jeff Misuik on site

08:30 → OSI departs

SO 3/22/10

LPR 3/22/10

Lower Passaic River

PWCW Oversight

Passaic Yacht Club

08:40 → Arrive at RM 1.4. SO confirms with Steve Bodak from OSI that they are using a GPS Trimble 4000 and following the New Jersey State Plane North American Datum 1983 coordinate system.

08:48 → OSI begins to lower bottom-mounted mooring at RM 1.4. Coordinates are:

Northing - 691228.80

Easting - 597991.01

Depth to bottom → 22'

09:00 → Begin deployment of top-buoy mooring. YSI is measuring 3' below water surface. Coordinates →

Northing → 691194.78

Easting → 597985.13

Depth → 3'

Please refer to Picture

SO 3/22/10

Location: LPR Date: 3/22/10

Project Official: Lower Passaic River PWCM Oversight

Log for photos taken throughout event.

09:11 → After deploying both surface and bottom moorings at RM 1.4; OSI drives boat back to Passaic Yacht Club to retreive next set of moorings for RM 4.2.

09:20 → Steve Bedat and Dustin Trach assemble moorings on boat. Bottom-mounted mooring contains a accoustic doppler current profiler (ADCP) and YSI model # 6920 to measure the conductivity, temperature, pH, DO, & turbidity. Surface mooring strictly has a YSI hanging 3' feet below a buoy with a rope.

10:03 → Depart from Passaic Yacht Club to advance to RM 4.2

Location: LPR Date: 3/22/10

Project Official: Lower Passaic River PWCM Oversight

across from new soccer stadium.

10:25 → Drive past RM 4.2 to Bridge St. Bridge in downtown Newark to check clearance for boat.

10:35 → Approach RM 4.2 to deploy moorings. Bottom-mounted mooring is deployed. Coordinates are:
Northing → 692327.24
Easting → 588243.00
Total Depth → 21.8'

10:43 → Surface mooring is deployed. Coordinates are:
Northing → 692328.50
Easting → 588277.85
Depth → 3'

10:51 → OSI begins hooking up CTD unit w/ attached turbidity meter.

10:56 → OSI lowers CTD

unit to take a profile of water column. Total depth is 18.5'.

11:02 → J.M. from AECOM takes sample from a depth of 15.5' at RM 4.2. Location/ Sample name → 10A-E01-T042-P1-BS

11:09 → ~~Grab~~ TTP S.D. 3/22/10 sample is taken at → 10A-E01-T042-P1-AS

Depth is 3'.

Note: Surface water temperature is 52°F and AECOM is only collecting samples to be analyzed for suspended solids concentration.

Cordinates: 10A-E01-T042-P1-BS

Northing → 692305.00

Easting → 588244.70

Depth → 15.5'

Cardinates: 10A-E01-T042-P1-AS

Northing → 692307.92

Easting → 588241.60

Depth → 3'

11:22 → Reach RM 1.4

3/22/10

and take profile of water column w/ CTD

11:30 → J.M. of AECOM takes bottom sample at location 10A-E01-T014-P3-BS

Northing → 691236.23

Easting → 597989.47

Depth → 19'

11:32 → AECOM collects top sample at location 10A-E01-T014-P3-AS

Northing - 691233.88

Easting - 597991.00

Depth → 3'

11:50 → Arrive back at Yacht club

11:58 → J.M. collects field blank using DI water. Name is 10A-E01-T014-P3-XR

12:15 → Depart Passaic Yacht Club

3/22/10

3/22/10

Location: LPR Date: 3/23/10

Project/Client: Lower Passaic River

PWCM Oversight

07:05 → Arrive at Passaic Yacht Club. OSI is on site.
Weather → Over-cast w/ moderate wind ~52°F
PPE → Level D Modified
OSI Crew → Dustin Koch
Steven Bodak
07:10 → OSI carries equipment onto boat.
07:20 → OSI begins setting up top and bottom moorings for today's locations.
07:28 → Jeff Misuik from AECOM arrives on site and gives health & safety briefing
07:42 → Depart from Yacht Club to advance to RM 6.7
08:05 → Arrive at RM 6.7 and OSI coordinates with GPS to arrive at exact location.
08:10 → OSI lowers bottom-mounted unit to river bottom.
Northing → 702834.80
Easting → 586142.48

C. O'Connor 3/23/10

Location: LPR Date: 3/23/10

Project/Client: Lower Passaic River

PWCM Oversight

Depth → 15'
08:14 → OSI begins setting up top mooring and deploys to within 1 foot from target location. Coordinates are:
Northing → 702807.23
Easting → 586122.56
Depth → 15'
Note: River current was traveling between 2 to 3 knots
08:37 → Arrive at RM 10.2. OSI finishes putting together bottom-mounted mooring.
09:03 → Deploy bottom-mounted mooring at RM 10.2. Coordinates are:
Northing → 719746.20
Easting → 592106.37
Total Depth → 17'
09:05 → Deploy top mooring (buoy w/ attached rope). Coordinates are:
Northing → 719713.56

C. O'Connor 3/23/10

LPR 3/23/10
Lower Passaic River
PWCM Oversight

Easting → 592111.89
Total Depth → 17.2'
09:30 → AECOM collects sample from bottom at 10A-E01-T102-P1-BS
Northing → 719747.75
Easting → 592111.20
Sample Depth → 14.2'
09:32 → AECOM collects ~~1sg~~ top mooring sample at location 10A-E01-T102-P1-AS
Northing → 719741.09
Easting → 592109.87
Sample Depth → 3'
09:35 → Water column profile was taken at RM 10.2.
09:55 → Approach RM 6.7 and begin setting up to collect samples and profile water column.
10:00 → Profile water column at RM 6.7
10:02 → Collect bottom sample at location 10A-E01-T067-P3-BS
Northing → 702832.64
S.O. 3/23/10

LPR 3/23/10
Lower Passaic River
PWCM Oversight

Easting → 586135.03
Sample Depth → 10.5'
10:04 → AECOM collects top sample at location 10A-E01-T067-P3-AS
Northing → 702831.97
Easting → 586141.03
Sample Depth → 3'
10:05 → Head back to Passaic Yacht Club.
* No field blanks will be collected today. AECOM collected 8 samples for suspended solid concentration analysis at each of the River Mile Locations. In total, AECOM collected 4 bottles for SSC analysis.
10:10 → OSI packs up equipment from boat
10:15 → SO departs Yacht Club en route to Edison warehouse to label bottleware for Wednesday AM
S.O. 3/23/10

Location: LPR 3/23/10

Project/Task: Lower Passaic River
PWCM Oversight

Thursday sampling activities. After speaking w/ Jeff Misuik of AECOM, SO and and Jeff Rutowski of CDM will meet AECOM at CPG field facility in East Rutherford. Jeff Rutowski will deploy instrumentation at RM 13.5 while SO will deploy instrumentation and perform transect above Dundee Dam.

S. O'K 3/23/10

S. O'K 3/23/10

Location: LPR 3/24/10

Project/Task: Lower Passaic River
PWCM Oversight

08:30 → SO arrives at CPG Field Facility. AECOM crew present includes:
Jeff Misuik (FTL)
Rei-Hua Wang (field member)
John Walter (field member)
08:45 → Spent w/ George Molnar on activities for today.
08:45 → Jeff Rutowski arrives at CPG field facility and signs in.
09:00 → Jeff Rutowski suits up and heads over to boat where John Walter from AECOM & QSI will be deploying instrumentation at RM 13.5
09:10 → SO stays at CPG field facility and waits for QSI to arrive with second boat to launch above Dundee Dam

S. O'K 3/24/10

Location LPR Date 3/24/10

Project / Client Lower Passaic River PWCM Oversight

10:05 → OSI arrives with second boat. JM tells OSI to drive up to launch and AECOM / CDM will meet shortly. SO →

10:20 → J.M. from AECOM & SO leave CPG field facility and drive up to boat launch above dam. Note: Boat launch is directly across from Elmwood Park Memorial Middle/High School SO →

10:30 → Arrive at launch. OSI is busy getting boat ready SO snaps a few pictures of OSI boat. Current on Passaic is strong. SO →

11:32 → Speak with Jeff Rutkowski of CDM. JR informs SO that he has finished oversight on deployment of RM 13.5. OSI is still getting boat ready along with assembling top and bottom

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Location LPR Date 3/24/10

Project / Client Lower Passaic River PWCM Oversight

moorings. SO →

12:10 → Board OSI boat with Jeff Misuik of AECOM, Dustin Irach of OSI, & Jay DeLorenzo of OSI SO →

12:15 → OSI begins calibrating ADCP before heading out to RM 17.5. SO →

* Health & Safety Meeting is conducted. All bodies on boat are wearing life preserver.

12:49 → Calibration of ADCP is complete. SO →

12:50 → Begin heading down river to reach destination.

12:56 → OSI must disassemble A-frame (pulley system) at front of boat due to low clearance of overpass.

13:45 → Deploy surface mooring at RM 17.5. This is directly north of dam. Depth of water → 11.2'

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Project / Client Lower Passaic River PWCM Oversight

* Please note: Surface mooring is deployed at location P2 at RM 17.5

14:00 → OSI prepares to complete transects across river at 4 locations: P1, P2, P3, & P4. CDM will collect split samples at P2 location. Dustin Roach continues to locate GPS coordinates from previous event.

14:15 → OSI profiles water column at P1 location at RM 17.5 near west shore of river. Total depth is 7.8'

14:23 → AECOM collects location 10A-E02-T175-P1-AS Collects 1-L poly for SSC and 3-250 ml poly for POC/DOC

14:25 → OSI positions vessel to location P2 where AECOM & CDM will collect samples

14:28 → OSI throws CTD into

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Location LPR Date 3/24/10

Project / Client Lower Passaic River PWCM Oversight

water to profile water column. Depth is 8.2'

14:33 → Collect CDM split at location 10A-E02-T175-P2-BS - CDM (2 bottles)

14:37 → CDM collects split at location 10A-E02-T175-P2-AS-CDM. CDM collects duplicate and MS/MSD (5 bottles)

14:43 → OSI positions vessel to P3 location and takes a profile of water column. is 6.8'

14:47 → AECOM collects samples at location 10A-E02-T175-P3-AS for SSC and POC/DOC

14:50 → OSI cast CTD to profile water column Total depth is 6.5'

14:53 → AECOM collects sample at location 10A-E02-T175-P4-AS for SSC and POC/DOC analysis

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Location LPR Date 3/24/10

Description Lower Passaic River
PWCM Oversight

15:00 → Make way back to boat launch in Elmwood Park.
15:30 → Arrive at boat launch and finish recording GPS coordinates ~~SC~~ SO →

P1 Coordinate ~~SC~~ SO →
Northing → 747325.10
Easting → 594434.15
~~Depth → SC~~

P2 Coordinate BS
Northing → 747511.60
Easting → 594485.11
~~Depth → SC~~

P2 Coordinate AS SO →
Northing → 747508.48 SO →
Easting → 594488.23 SO →
P3 Coordinate AS SO →
Northing → 747680.41 SO →
Easting → 594632.01 SO →
P4 Coordinate SO →
Northing → 747745.91 SO →
Easting → 594673.69 SO →
* Refer to next page to see CDM split samples

S. O'C 3/24/10

Location LPR Date 3/24/10

Description Lower Passaic River
PWCM Oversight

CDM samples are:
10A-EQ2-T175-P2-AS-CDM
10A-EQ2-T175-P2-AS-X
10A-EQ2-T175-P2-BS-CDM
06:30 → Arrive back at CDM warehouse in Edison. Mel Haberle arrives to assist w/ packing and provide chains.
06:00 → SO drops samples off at DESA building # 209 and walks 1 cooler into refrigerator.
06:15 → SO en route back to home.

S. O'C
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SC 3/24/10

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Project/Client Lower Passaic River
PWCM Oversight

06:25 → SO arrives at CPG field facility → SO
06:35 → Mike Hauser gives health & safety meeting → SO
06:45 → Depart CPG field facility and move to RM 13.5 to perform transect and collect samples. → SO
Weather → Clear skies ~ 40°F → SO
PPE → Level D Modified → SO
06:50 → OSI begins performing transect with ADCP → SO
07:00 → OSI takes profile of water column → SO
Total Depth is 12.3' → SO
07:06 → CDM collects split sample at location 10A-E03-T13S-P3-BS-CDM → SO
07:09 → CDM collects split sample at location 10A-E03-T13S-P3-AS-CDM → SO
07:15 → OSI takes profile of water column.

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07:17 → AECOM collects location 10A-E03-T13S-P2-BS → SO
07:19 → AECOM collects samples at location 10A-E03-T13S-P2-AS → SO
07:29 → OSI takes samples at location 10A-E03-T13S-P1-BS. * Note: AECOM collects profile of water column before AECOM collects sample → SO
07:31 → AECOM collects sample at location 10A-E03-T13S-P1-AS → SO
07:35 → Speak w/ Mel Koberle of CDM and notify her of time on samples. OSI proceeds to next location at RM 10.2 → SO
07:47 → Approach RM 10.2 It is important to note that top-mooring buoy is missing. OSI suggested

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PWCM Oversight

that buoy may have been knocked down river by a large object or may be submerged. OSI will continue to run transect and collect samples.

08:06 → AECOM & CDM collects samples at location 10A-E03-T102-P1-BS-CDM

08:02 → OSI takes profile of water column. Total Depth is 11.21

08:05 → CDM collects split sample w/ AECOM at location 10A-E03-T102-P1-AS-CDM Sample depth is 3'.

08:10 → OSI moves to P2 location in middle of river.

*Important: CDM split ~~at~~ at RM 13.5 is on east side of ~~Rutherford~~ Passaic River. CDM split at RM 10.2 is on west side of river.

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08:18 → AECOM collects SSC sample at 10A-E03-T102-P2-BS (TD = 17.1')

08:19 → AECOM collects SSC sample at 10A-E03-T102-P2-AS.

08:27 → AECOM collects SSC samples & PAC/DEC samples at location 10A-E03-T102-P3-BS

08:29 → AECOM collects samples at location 10A-E03-T102-P3-AS

Total Depth = (10.1')

08:30 → OSI heads down to RM 6.7

Persons on Board include:
Sean O'Hare (CDM)
Mike Hauser (AECOM)
Dustin Kach (OSI)
Jay DeLorenzo (OSI)

08:54 → Arrive at RM 6.7. Current is strong and has pulled up mooring!

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Location: LPR Date: 3/25/10

Project / Client: Lower Passaic River
PWCM Oversight

buoy almost completely under water.

09:00 → OSI lowers ADCP to edge of boat and begins to take transect survey across river

09:13 → OSI lowers CTD into water to profile water column. Total Depth is 12.8'

09:20 → AECOM collects samples at location 10A-E03-T067-P1-BS. Total Depth is 12.8'.

09:22 → AECOM collects samples at location 10A-E03-T067-P1-AS

09:24 → OSI casts CTD unit at P2 location to profile water column. Total Depth is 15.2'

09:27 → AECOM collects SSC sample at location 10A-E03-T067-P2-BS

09:28 → AECOM collects

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Location: LPR Date: 3/25/10

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SSC sample at location 10A-E03-T067-P2-AS

09:30 → Move to P3 location at RM 6.7 and cast CTD to profile water column. Total Depth is 14.2'

09:34 → CDM collects split sample at location 10A-E03-T067-P3-BS-CDM.

09:36 → CDM collects split sample at location 10A-E03-T067-P3-AS-CDM

09:40 → OSI directs vessel back to CPG Field Facility

09:55 → Vessel runs out of gas and have to park boat on side of river ~ 1/4 mile north of Route 3 Bridge. Dustin Koch goes to gas station and picks up gas.

10:40 → Arrive back at CPG field facility. OSI

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PWCM Oversight

says that ebb tide is around 12:00 PM. We will be leaving for second round of transects/ samples at 12:30.

10:50 → Transfer samples to Mel Troberle of CDM to ship back to Edison Warehouse

11:00 → Arrive at CPG Facility and sign in.

12:43 → Head back out on boat to collect samples and transects during ebb tide. OSI lowers ADCP into water and begins to perform transect from one side to other.

17:01 → OSI lowers CTD at P1 to profile water column. Total depth is 7.7'

17:04 → AECOM collects sample at location 10A-E04-T135-P1-BS. AECOM is collecting a duplicate at this location named 10A-E04-

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PWCM Oversight

T135-P1-BT

13:06 → AECOM collects samples at 10A-E04-T135-P1-AS

13:13 → AECOM collects sample at 10A-E04-T135-P2-BS for suspended solids. * Note: CTD cast before collection to capture profile of water column. Total depth is 12.1'.

13:15 → AECOM collects sample at location 10A-E04-T135-P2-AS.

13:17 → OSI lowers CTD to profile water column at P3. Total Depth is 15.9'

13:22 → CDM collects split sample at 10A-E04-T135-P3-BS

13:25 → CDM collects split sample at 10A-E04-T135-P3-AS

13:30 → Mike Houser makes quick stop at CPG Facility to drop off Hg to Rci (Sample

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Manager)

13:35 → OSI navigates vessel downstream to RM 10.2. Note. Surface Mooring is missing. It has either washed out at bay or is submerged.

13:50 → Arrive at RM 10.2 and find missing surface mooring. Mooring is ~ 4' below river surface and will need to be picked up since it is caught on a large object.

13:55 → Deploy ADCP and begin transect at RM 10.2

14:02 → Speak w/ George Molnar of CDM on status.

14:11 → OSI cast CTD to profile water column. Total depth is 15.1'

14:16 → CDM collects split sample at location 10A-E04-T135-P1-BS

14:19 → CDM collects split sample at location 10A-E04-T135-P1-AS

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PWCM Oversight

14:13 → OSI casts CTD at P2 Total Depth is 16'

* Note: AECOM collected duplicate at 10A-E04-T135-P1-AT

14:27 → AECOM collects samples at 10A-E04-T135-P2-BS and duplicate at 10A-E04-T135-P2-BT

14:28 → AECOM collects sample at 10A-E04-T135-P2-AS

14:31 → OSI casts CTD to profile water column at P3 location. Total depth is 16.2'

14:35 → AECOM collects samples at 10A-E04-T135-P3-BS

14:37 → AECOM collects samples at 10A-E04-T135-P3-AS

14:40 → Finish sampling / transects at RM 10.2. OSI proceeds to RM 6.7

15:03 → Arrive at RM 6.7

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and observe surface buoy is leaning and is on its side. Please refer to picture log.
15:05 → Deploy ADCP at RM 6.7 and begin performing transect.
15:18 → OSI casts CTD to profile water column. Total Depth is 10'
15:21 → AECOM collects location 10A-E04-T067-P1-BS
15:22 → AECOM collects location 10A-E04-T067-P1-AS
15:25 → OSI casts CTD to profile water column. Depth is 17'. Taken at location P2
15:28 → AECOM collects sample at 10A-E04-T067-P2-BS
15:29 → AECOM collects sample at 10A-E04-T067-P2-AS
15:30 → OSI casts CTD to profile water colum. Total depth is 16.2'
15:36 → CDM collects split

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sample at 10A-E04-T067-P3-BS-CDM
15:38 → CDM collects split sample at location 10A-E04-T067-P3-AS-CDM
15:40 → Pull up CTD / ADCP and advance vessel to CP6 Facility. * Note: OSI attaches a bent buoy to surface mooring to make more visible
16:05 → Stop by RM 10.2 and observe surface mooring is standing half-way up. OSI is attempting to determine if buoy is caught on anything. Buoy is untangled.
* OSI will need to service buoys at RM 6.7 and RM 10.2 to ensure better flotation. In addition, OSI will add an additional bent buoy at RM 17.5 above Dundee Dam.

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PWCM Oversight

16:40 → Arrive back at CPG Facility ——— SO ———→

16:41 → AECOM collects field blank 10A-E04-T067-P3-AR ——— SO ———→

16:45 → SO goes into CPG field facility to sign out and then departs back to Edison warehouse. SO will meet with Mel Koberle of CDM to pack samples into coolers. ——— SO ———→

17:45 → Arrive at CDM warehouse in Edison w/ Mel Koberle. Samples are packed w/ ice, chains & absorbent pads ——— SO ———→

18:20 → SO drives samples to DESA building # 209 and places into walk-in refrigerator. ———→

18:45 → SO en route back home. ———

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PWCM Oversight

Split samples collected by CDM on March 25, 2010 include:

10A-E03-T067-P3-AS-CDM
10A-E03-T067-P3-BS-CDM
10A-E04-T067-P3-AS-CDM
10A-E04-T067-P3-BS-CDM
10A-E03-T102-P1-AS-CDM
10A-E03-T102-P1-BS-CDM
10A-E04-T102-P1-AS-CDM
10A-E04-T102-P1-BS-CDM
10A-E03-T135-P3-AS-CDM
10A-E03-T135-P3-BS-CDM
10A-E04-T135-P3-AS-CDM
10A-E04-T135-P3-BS-CDM

* All sampling locations listed above were analyzed for suspended solid concentration, POC & DOC

3/25/10

S.O. 3/25/10

Attachment 3
Field Change Request Form

Lower Passaic River Restoration Project
OU3- RI/FS Oversight
Passaic River, NJ

Field Change Request

Date: March 31, 2010

Request No.: 2

FCR Title: Additional Surface Water Split Sample above Dundee Dam

Description: CDM's Final QAPP for PWCM oversight activities indicated that the CPG would collect only one sample from three feet below river surface from the location collocated with *in-situ* instruments above Dundee Dam as only a buoy-mounted OBS meter is deployed. Thus, CDM proposed one split sample be collected at this location during each event over the course of the study. During March 2010 field activities, the CPG collected samples for SSC, DOC, and POC analysis at this location from three feet below river surface and three feet above river bottom. In addition to the surface water split sample collected three feet below river surface, CDM decided to collect a split sample from the location three feet above river bottom. This resulted in a total of two splits samples being collected that corresponded to the *in-situ* instrumentation instead of one as stated in the oversight QAPP.

Reason for Deviation: Increasing the number of split samples collected above Dundee Dam will allow for greater statistical comparison with the parent samples collected by the CPG to determine if a bias exists in the data produced by the CPG.

Recommended/Modification: During each field event, CDM will collect an additional surface water split sample for SSC, DOC, and POC analysis from three feet above river at the location collocated with the buoy-mounted OBS meter above Dundee Dam.

Impact on Data Quality Objectives: The collection of these additional samples will allow additional statistical data analysis on the samples collected above Dundee Dam improving the project data quality objectives.

USACE Contract No.: W912DQ-08-D-0018

Task Order No.: 014

Signatures:

George Molnar, CDM Field Team Leader

Sharon Budney, CDM Deputy Task Order Manager

cc:
Stephanie Vaughn, EPA Remedial Project Manager
Elizabeth Buckrucker, USACE Project Manager
Bill Sy, EPA
Frank Tsang, CDM Task Order Manager
Jeniffer Oxford, CDM Quality Assurance Coordinator
CDM Oversight staff

Attachment 4
Copies of Signed Chain of Custodies

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: R
Client No:

Region:	2	Date Shipped:	3/24/2010	**Chain of Custody Record**	Sampler Signature: Melk 3/24/10 1520
Project Code:		Carrier Name:	Hand Courier	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:		Airbill:		1 Melk 3/24/10 1520	
CERCLIS ID:	NJD980528996	Shipped to:	DESA Laboratories/EPA 2890 Woodbridge Ave Bldg. 209 Edison NJ 08837 (732) 906-6886	2	
Spill ID:	0296			3	
Site Name/State:	Lower Passaic River Restoration Project/N.			4	
Project Leader:	George Molnar				
Action:	Combined RI/FS				
Sampling Co:	CDM				

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
10A-E02-T175-P2-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (3)	10A-E02-T175-P2-AS-CDM	S: 3/24/2010 14:37	Lab QC
10A-E02-T175-P2-AS-X	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	100 (Ice Only) (2)	10A-E02-T175-P2-AS-X	S: 3/24/2010 14:37	Field Duplicate
10A-E02-T175-P2-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E02-T175-P2-BS-CDM	S: 3/24/2010 14:33	--

Melk 3/24/10

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: 10A-E02-T175-P2-AS-C	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
D/POCSS0.7 = DOC (5310B) POC (440) Suspended Solid, SS 1.5 um = Suspended Solids (ASTM 3977-97) (1.5 u			

TR Number: **2-043013577-032410-0001**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

EPA USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: R
Client No:

Region:	2	Date Shipped:	3/25/2010	**Chain of Custody Record**	Sampler Signature: Melissa 3/25/10 16:00
Project Code:		Carrier Name:	Hand Courier	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:		Airbill:		1 Melissa 3/25/10 16:00	
CERCLIS ID:	NJD980528996	Shipped to:	DESA Laboraties/EPA 2890 Woodbridge Ave Bldg. 209 Edison NJ 08837 (732) 906-6886	2	
Spill ID:	0296			3	
Site Name/State:	Lower Passaic River Restoration Project/N.			4	
Project Leader:	George Molnar				
Action:	Combined RI/FS				
Sampling Co:	CDM				

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		QC Type
10A-E04-T01 4-P3-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T014-P3-AS-CDS: M	3/25/2010	14:33	--
10A-E04-T01 4-P3-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T014-P3-BS-CDS: M	3/25/2010	14:30	--
10A-E04-T04 2-P1-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T042-P1-AS-CDS: M	3/25/2010	15:01	--
10A-E04-T04 2-P1-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T042-P1-BS-CDS: M	3/25/2010	14:59	--
10A-E04-T13 5-P3-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T135-P3-AS-CDS: M	3/25/2010	13:25	--

Melissa 3/25/10 Melissa 3/25/10

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
D/POCSS0.7 = DOC (5310B) POC (440) Suspended Solid, SS 1.5 um = Suspended Solids (ASTM 3977-97) (1.5 u			

TR Number: 2-043013577-032510-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

EPA USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: R
Client No:

Region:	2	Date Shipped:	3/25/2010	**Chain of Custody Record**	Sampler Signature: [signature] 3/25/10 16:00
Project Code:		Carrier Name:	Hand Courier	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:		Airbill:		1 [signature] 3/25/10 16:00	
CERCLIS ID:	NJD980528996	Shipped to:	DESA Laboraties/EPA 2890 Woodbridge Ave Bldg. 209 Edison NJ 08837 (732) 906-6886	2	
Spill ID:	0296			3	
Site Name/State:	Lower Passaic River Restoration Project/N.			4	
Project Leader:	George Molnar				
Action:	Combined RI/FS				
Sampling Co:	CDM				

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		QC Type
10A-E04-T067-P3-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T067-P3-AS-CDS M	3/25/2010	15:38	--
10A-E04-T067-P3-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T067-P3-BS-CDS M	3/25/2010	15:36	--
10A-E04-T102-P1-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T102-P1-AS-CDS M	3/25/2010	14:19	--
10A-E04-T102-P1-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T102-P1-BS-CDS M	3/25/2010	14:16	--
10A-E04-T135-P3-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E04-T135-P3-BS-CDS M	3/25/2010	13:22	--

[signature] 3/25/10 [signature] 3/25/10

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

D/POCSS0.7 = DOC (5310B) POC (440) Suspended Solid, SS 1.5 um = Suspended Solids (ASTM 3977-97) (1.5 u

TR Number: 2-043013577-032510-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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EPA USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: R
Client No:

Region:	2	Date Shipped:	3/25/2010	**Chain of Custody Record**	Sampler Signature: [signature] 3/25/10 12:20
Project Code:		Carrier Name:	Hand Courier	Relinquished By / (Date / Time)	Received By / (Date / Time)
Account Code:		Airbill:		1 [signature] 3/25/10 12:20	
CERCLIS ID:	NJD980528996	Shipped to:	DESA Laboratories/EPA 2890 Woodbridge Ave Bldg. 209 Edison NJ 08837 (732) 906-6886	2	
Spill ID:	0296			3	
Site Name/State:	Lower Passaic River Restoration Project/N.			4	
Project Leader:	George Molnar				
Action:	Combined RI/FS				
Sampling Co:	CDM				

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		QC Type
10A-E03-T01-4-P3-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T014-P3-AS-CDSM	3/25/2010	8:22	--
10A-E03-T01-4-P3-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T014-P3-BS-CDSM	3/25/2010	8:19	--
10A-E03-T04-2-P1-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T042-P1-AS-CDSM	3/25/2010	8:56	--
10A-E03-T04-2-P1-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T042-P1-BS-CDSM	3/25/2010	8:54	--
10A-E03-T13-5-P3-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T135-P3-AS-CDSM	3/25/2010	7:09	--

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
D/POCSS0.7 = DOC (5310B) POC (440) Suspended Solid, SS 1.5 um = Suspended Solids (ASTM 3977-97) (1.5 u			

TR Number: **2-043013577-032510-0002**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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EPA USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: R
Client No:

Region:	2
Project Code:	
Account Code:	
CERCLIS ID:	NJD980528996
Spill ID:	0296
Site Name/State:	Lower Passaic River Restoration Project/N.
Project Leader:	George Molnar
Action:	Combined RI/FS
Sampling Co:	CDM

Date Shipped:	3/25/2010
Carrier Name:	Hand Courier
Airbill:	
Shipped to:	DESA Laboratories/EPA 2890 Woodbridge Ave Bldg. 209 Edison NJ 08837 (732) 906-6886

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	3/25/10 12:00		
2			
3			
4			

Sampler Signature: 3/25/10

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		QC Type
10A-E03-T067-P3-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T067-P3-AS-CDS: M	3/25/2010	9:36	--
10A-E03-T067-P3-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T067-P3-BS-CDS: M	3/25/2010	9:34	--
10A-E03-T102-P1-AS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T102-P1-AS-CDS: M	3/25/2010	8:08	--
10A-E03-T102-P1-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T102-P1-BS-CDS: M	3/25/2010	8:06	--
10A-E03-T135-P3-BS-CDM	Surface Water/ Melissa Koberle	L/G	D/POCSS0.7 (21), SS 1.5 um (21)	(Ice Only) (2)	10A-E03-T135-P3-BS-CDS: M	3/25/2010	7:06	--

3/25/10

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

D/POCSS0.7 = DOC (5310B) POC (440) Suspended Solid, SS 1.5 um = Suspended Solids (ASTM 3977-97) (1.5 u

TR Number: 2-043013577-032510-0001

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